

### REMARKS

This Application has been carefully reviewed in light of the Office Action mailed October 4, 204. At the time of the Office Action, Claims 1-19 were pending in this Application. Claims 1-6, 8, 9, 11-17 and 19 were rejected. Claims 7, 10 and 18 were objected to. Claims 1-19 have been amended to further define various features of Applicants' invention. Applicants respectfully request reconsideration and favorable action in this case.

#### Rejections under 35 U.S.C. §103

Claims 1-5, 9 and 12-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 4,608,506 issued to Chiaki Tanuma ("Tanuma") in view of U.S. Patent 4,632,311 issued to Shinichi Nakane et al. ("Nakane et al."). Applicants respectfully traverse and submit that the combination of the teachings of Tanuma and Nakane, even if proper which Applicants do not concede, does not render the claimed invention obvious.

Claims 6, 8, 11, 17 and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tanuma in view of Nakane et al. as applied to Claim 1 above, and further in view of U.S. Patent 5,387,834 issued to Masashi Suzuki. Applicants respectfully traverse and submit that the combination of the cited art, even if proper which the Applicants do not concede, does not render the claimed invention obvious.

In order to establish a *prima facie* case of obviousness, the references cited by the Examiner must disclose all claimed limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Furthermore, according to § 2143 of the Manual of Patent Examining Procedure, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Here, a *prima facie* case of obviousness has not been established and the Applicants request withdrawal of the rejection. For example, Tanuma is cited for disclosing "a piezoelectric actuator (Fig. 1, #12) whose physical output position is temperature compensated via connecting a capacitor in series with the actuator." And Nakane is cited for disclosing that "piezoelectric actuators can be temperature compensated by a capacitor connected either a [sic] series figs . . . 9, 10) or in parallel (fig. 12) with the piezo element." The Examiner concludes "in view of the equivalent teaching of Nakane, it would have been obvious . . . that Tanuma could be temperature compensated by either a series or parallel connected capacitor." Applicants respectfully disagree with this conclusion, because a combination of the teachings of Nakane with Tanuma does not lead to the claimed invention. Nakane discloses in Figure 12 his only "in parallel" embodiment. A review of Nakane's Figure 12 illustrates it is directed to a circuit comprising an "inductor 21" in series with "piezoelectric transducer 1," and "piezoelectric transducer 1" is coupled in parallel with "capacitance C<sub>2</sub> at 41." Nakane teaches that the embodiment of Figure 12 is advantageous where "the magnitude of the temperature-dependent variation of inductor 21 is much smaller than that of the equivalent capacitance C<sub>0</sub> of the piezoelectric transducer 1." (Col. 5, lines 29-46). Thus, Nakane teaches that the Figure 12 embodiment with parallel capacitance, is useful when an "inductor 21" is utilized in the circuit and the temperature dependent variation magnitude of "inductor 21" is much smaller than that of the "piezoelectric" element. A review of Tanuma reveals a circuit, see Figures 1 and 2, that does not include an "inductor" in series with the "piezoelectric element." Consequently, applying the teachings of Nakane, concerning circuits not including an inductor in series with the piezoelectric element, to Tanuma, one of ordinary skill in the art would be lead to use a capacitance "in series" with the piezoelectric element, not "in parallel" because Tanuma is not concerned with the capacitance of an inductor and a piezoelectric element. Thus, Applicants respectfully request withdrawal of the rejection and favorable action.

Allowable Subject Matter

Applicants appreciate Examiner's consideration and indication that Claims 7, 10, and 18 would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Applicants have added new Claims 20-22 (old Claims 7, 10 and 11) and submit said claims are in condition for allowance.

Updated PTO-892

Applicants respectfully request that U.S. Patent 5,387,834 issued to Masashi Suzuki which was cited against Claims 6, 8, 11, 17, and 19 on page 3 of the Office Action mailed October 4, 2004, be added to a PTO-892, Notice of References Cited.

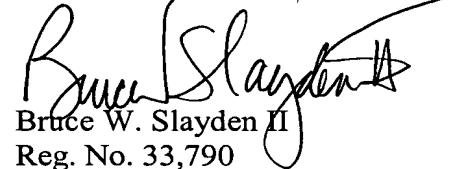
**CONCLUSION**

Applicants have now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration of Claims 1-19 as amended and allowance of Claims 20-22.

Applicants believe there are no fees due, however, the Commissioner is hereby authorized to charge any fees to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2606.

Respectfully submitted,  
BAKER BOTTS L.L.P.  
Attorney for Applicants

  
Bruce W. Slayden II  
Reg. No. 33,790

Date: Dec. 14, 2004

SEND CORRESPONDENCE TO:  
BAKER BOTTS L.L.P.  
CUSTOMER ACCOUNT NO. **31625**  
512.322.2606  
512.322.8306 (fax)